

## CLAIMS

1. Method of marking by sublimation and application of decorated film or paper on extruded bars (3) with polygonal cross-sections, with no limit on length, by sublimation or decorative veneering through a matrix (1) and a die (2), which are heated and supported by a vibrating base plate (5).
2. Device for implementing the method according to claim 1, characterised in that the inside of the die (2) is in the shape of the object to be decorated (3).
3. Device according to claim 2, characterised in that the extruded bar (3) to be decorated, according to the nature of its material, can be cooled or not at the outlet of the device by spraying (6) with a cooling liquid, such as water.
4. Device according to claims 2 and 3, characterised in that the winding (7) of the waste in the case of sublimation is carried out automatically or not.
5. Device according to claim 2, characterised in that the base plate (5) that supports the matrix (1) and the die (2) vibrates by means of processes such as the generation of ultrasounds or vibration by electromagnet.
6. Device according to claim 2, characterised in that the die (2) can be built into the cone (1) that shapes the decoration support (4).
7. Device according to claim 2, characterised in that the die (2) can replace the cone (1) with a simple chamfer at its intake in case in which the shape of the product to be marked (3) is simple.
8. Device according to claim 2, characterised in that the intermediate sections of the cone (1) are obtained through

the principle of morphing. The intake (8) has a circular intake; the cross-section of the outlet (9) is in the shape of the product to be marked (3).

5 9. Device according to claim 2, characterised in that the cone (1) can act as a die (2) by virtue of its outlet shape, thus doing away with the need for mounting a die (2).

10 10. Device according to claim 2, characterised in that, in the case of the product to be marked (3) comprising small irregularities in its shape, O-rings can be mounted in a series of gorges inside the die (2), which ensure that correct contact is maintained between the decoration support (4) and the product to be marked (3).